Bangalore Electricity Supply Company Limited

Technical Specification with Drawing for Danger Notice Plates

1. **SCOPE**

This Specification covers Danger Notice Plates to be displayed in accordance with rule No. 35 of Indian Electricity Rules, 2003.

2. **APPLICABLE STANDARDS**

Unless otherwise modified in this specification, the Danger Notice Plates shall comply with IS: 2551-1982 or the latest version thereof.

2.1 **DANGER SIGNAGE:** is one of the mandatory Signage as per Rule No. 35 of the Indian Electricity Rules on the transmission line to provide proper indications about the electricity phases or signals like high voltage or high-tension wires, gateways, and at Distribution transformer centres/RMU centres/sub-stations are the one of the mandatory steps in the interest of human safety. It also alerts all occupants about the hazardous situation, if avoided, will result in death or severe injury. BESCOM wants to make all audiences and workers aware of the risk involved in the specific area of the workplace. The **Danger Notice Plate** identifies the high-risk area and extreme caution to be taken by all employees. Apart from this, **Danger Sign Boards** are essential in locations where there is a risk of open electrical wiring or naked wires.

2.2 **DANGER NOTICE PLATES:** of different sizes, different designs have been installed at various locations. **BIS** has adopted an **IS standard** for DANGER NOTICE PLATES to cover the standardized features of notice plates in line with Indian Electricity Rule 35. The owner of every medium, high, and extra high voltage must install **Danger Sign Board as per Standard IS: 2511** permanently at a place that is visible from a long distance and communicates mass audience.

3. **DIMENSIONS**

3.1 Two sizes of Danger Notice Plates as follows are recommended:

a) For display at 415 V installations – 200x150 mm
b) For display at 11 KV (or higher voltages) installations – 250x200 mm

3.2 The corners of the plates shall be rounded off.

3.3 The location of fixing holes as shown in Figs. Provisional and can be modified to suit the requirements of the purchaser.

4. **LETTERINGS**

All letterings shall be centrally spaced. The dimensions of the letters, figures and their respective position shall be as shown in figs. The size of letters in the words in each language and spacing between them shall be so chosen that these are uniformly written in the space earmarked for them.

5. **LANGUAGES**

5.1 Under Rule No. 35 of Indian Electricity Rules, 2003, the owner of every medium, high and extra high voltage installation is required to affix permanently in a conspicuous position a danger notice in Hindi or English and, in additions, in the local language, with the sign of skull and bones.

5.2 The type and size of lettering to be done in Hindi is indicated in the specimen danger notice plates as per IS 2551-1982. The successful bidder obtain the drawing approval from BESCOM QS&S section before manufacturing and shall arrange for 10 Nos. of proto type samples testing by BESCOM for mass manufacturing clearance.

5.3 Adequate space has been provided in the specimen danger notice plates for having the letterings in local language for the equivalent of 'Danger', '415 Volts', and '11000 Volts'.

6. **MATERIAL AND FINISH**

6.1 The plate shall be made from ACP (Aluminum Composite Panel as per IS 17682:2021) sheet of thickness 4mm and letters are Digitally printed vinyl sticker with lacker coating mounted on ACP sheet with necessary holes/adhesive for installation. Letters, figures and the conventional skull and cross-bones shall be in signal red colour with white background.

6.2 **For 11kV -**Board dimension – 250mm X 200mm, suitable for pasting or fixing on the metallic surface/RCC poles/ DTC centres structures.

6.3 **For 415V** - Board dimension – 200mm X 150mm, suitable for pasting or fixing on the metallic surface/RCC poles/ DTC centres structures

7. **TESTS:**

a) **Test Report:** The test report as per Indian standard OR International standards for ACP material shall be furnish.

1. Dimensional verification
2. Skin properties Test
3. Core material Test
4. Surface test
5. Thermal properties Test

b) Acceptance test: The following tests shall be carried out:

i) Visual examination as per approved drawing
ii) Dimensional check as per approved drawing
iii) Test for weather proof ness as per IS: 8709-1977 (or its latest version)

8. **MARKING:** Maker's name and trade mark and the purchase's name shall be marked in such a manner and position on the plates that it does not interfere with the other information.

9. **PACKING:** The plates shall be packed in paper carton box or wooden crates suitable for rough handling and acceptable for rail/road transport.

General Manager (El.)